

#154 Kölsch

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **26**
- SRM **4.2**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **15 %**
- Size with trub loss **19.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **67 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.4 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|--------|-----|
| Grain | Briess - Pilsen Malt | 3.4 kg (76.4%) | 80.5 % | 2 |
| Grain | Strzegom Monachijski typ I | 1 kg (22.5%) | 79 % | 16 |
| Sugar | Brown Sugar, Light | 0.05 kg (1.1%) | 100 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Magnum | 12 g | 60 min | 13.5 % |
| Boil | Tettnang | 30 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| K-97 | Ale | Dry | 11 g | Fermentis |